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10/006,055	12/06/2001	Ellis T. Fisher	010387	9043

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EXAMINER
DAGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/006,055	FISHER, ELLIS T.
	Examiner	Art Unit	
	Stephen M. D'Agosta	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 September 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29 and 32* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14,17,18,22-25,28 and 29* is/are allowed.

6)☒ Claim(s) *1-13,15,16,19-21,26,27 and 32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-17, 19-21, 26-27 and 32 have been considered but are moot in view of the new ground(s) of rejection.

1. The applicant has amended several independent claims to require the mobile unit, and not the "system", to detect if/when the mobile is in a HRD area. Hence the examiner has applied new art to reject this "further refined" claim language. Previously, either the phone or BTS could make that determination.

2. Independent claim 12 was not amended. The examiner clarifies his rejection to show that Magnusson teaches the mobile unit making the decision as to which network to use (based on the information sent to it from the network) – see page 5, L16-19 and L32-35).

3. Claims 14, 17-18, 22-25 and 28-29 are allowed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 5-13, 15-17, 19-21 and 26-27 and 32 rejected under 35

U.S.C. 103(a) as being unpatentable over Magnusson et al. WO99-49690 and further in

view of O'Carroll US 6,714,794 and Djuphammar US 6,879,580 (hereafter Magnusson

and O'Carroll and Djuphammar).

As per **claims 1, 6 and 12**, Magnusson teaches a ~~system comprising~~:
detecting when a wireless mobile unit is in an high data rate (HDR) area (page 5,
L16 to page 6, L12 teaches SIM Card processor receiving/storing data from cell
broadcast to include information about an HDR area), ₁
a processor being configured to determine a need for exchanging data between
said wireless mobile unit and the base station (BTS) [page 6, L13-29 teaches system
using carrier data for selection of an optimal system for data exchange and example
disclosed on page 6, L30 to page 7, L21]; and
A data burst optimizer (DBO) configured to exchange said data between said
wireless mobile unit and said BTS in HDR area (page 7, L15-21 teaches an example
whereby the processor/DBO selects optimal means for exchanging data based on the
user's selected application).
But is silent on a mobile unit determining when in HDR Area and a signal
strength indicator AND use of CDMA communications AND determining if by
determining whether a signal strength of a HDR carrier signal broadcast by a BTS
exceeds a predetermined level AND automatically exchange data and using CDMA
when the strength indicator detects said wireless mobile unit is in said HDR CDMA area
and the processor determines a need for exchanging data between the mobile and
BTS.
O'Carroll teaches a communication system for wireless communications users
(CDMA, C4, L35-47), discloses use of signal strength (C3, L23-27 and C8, L23-29) and
will automatically transmit data when there is data to send (figure 7 shows that
communications will automatically occur when the unit is within a certain area and there
is data to transmit).
Djuphammar teaches a CDMA multi-service carrier system (title, abstract, figures
1-2) whereby the mobile senses the pilot signal of different BTS's which have low and
high-rate capabilities and selects one according to if low-rate voice is to be transmitted

<u>and/or high-rate data (C1, L29-61, C2, L28-45 and C3, L64 to C5, L27 which teaches
searching for different pilots, ie. sensing if a signal strength is high/low and selecting a
BTS's data rate based on that signal strength).</u>

It would have been obvious to one of ordinary skill in the art at the time of
applicant's invention to modify Magnusson, such that it uses a signal strength indicator
AND use of CDMA communications AND determining if by determining whether a signal
strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level
AND automatically exchange data and using CDMA when the strength indicator detects
said wireless mobile unit is in said HDR CDMA area and the processor determines a
need for exchanging data between the mobile and BTS, to provide means for the unit to
determine when it can transmit data at high(er) data rates.

As per **claim 2**, Magnusson teaches claim 1 wherein said processor invokes said
DBO to automatically exchange said data between said wireless mobile unit and said
BTS when said wireless mobile unit is in said HDR area (page 5, L30-35 teaches
system selecting the optimal carrier service, eg. HDR, based on the application
chosen).

As per **claim 3**, Magnusson teaches claim 1 wherein said DBO is configured to
continuously detect when said wireless mobile unit is in said <u>CDMA</u> HDR area (page 5,
L16-35 teaches mobile receiving SMS over cell broadcast which one skilled
understands can be continuously monitored for local carrier service changes as the
mobile roams. The examiner also notes that the mobile unit must continuously monitor
for HDR coverage as it roams since roaming out of coverage will terminate the HDR
service).

As per **claim 4**, Magnusson teaches claim 1 **but is silent on** wherein said DBO
transmits a logon name and password to said BTS to authenticate said wireless mobile
unit.
Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user
logon name and password for security authentication (eg. via Microsoft Windows OS).
One skilled would use the well known method of requiring Logon/password for security
purposes. Cellular systems also utilize security precautions to prevent fraud and
cloning whereby the user is authenticated during the registration process.
It would have been obvious to one of ordinary skill in the art at the time of
applicant's invention to modify Magnusson, such that said DBO transmits a logon name
and password to said BTS to authenticate said wireless mobile unit, to provide
authentication of the user via a logon name and password.

As per **claim 5**, Magnusson teaches claim 3 wherein said DBO is configured to
stop exchanging said data between said mobile unit and said BTS when said mobile is
not in said HDR area (page 5, L16-35 teaches mobile receiving SMS over cell
broadcast which one skilled understands can be continuously monitored for local carrier
service changes as the mobile roams. The examiner also notes that the mobile unit

must continuously monitor for HDR coverage as it roams since roaming out of coverage
will terminate the HDR service).

As per **claim 7**, Magnusson teaches claim 6 wherein said determining means
invokes said exchanging means to automatically exchange said data between when
said wireless mobile unit is in said HDR area (page 5, L30-35 teaches system selecting
the optimal carrier service, eg. HDR, based on the application chosen).

As per **claim 8**, Magnusson teaches claim 6 wherein said determinging means
invokes said automatically exchanging means to exchange said data between when
said wireless mobile unit is in said HDR area (page 5, L30-35 teaches system selecting
the optimal carrier service, eg. HDR, based on the application chosen) and said
determining means determines said need to exchange said data between said wireless
mobile unit and BTS (page 6, L30 to page 7, L20 teaches an example whereby the user
operates a computer and the system determines which carrier service to use for
transmitting/exchanging data.

As per **claim 9**, Magnusson teaches claim 7 wherein said exchanging means
continuously detects when said wireless mobile unit is in said HDR <u>CDMA</u> area (page 5,
L16-35 teaches mobile receiving SMS over cell broadcast which one skilled
understands can be continuously monitored for local carrier service changes as the
mobile roams. The examiner also notes that the mobile unit must continuously monitor
for HDR coverage as it roams since roaming out of coverage will terminate the HDR
service).

As per **claim 10**, Magnusson teaches claim 6 **but is silent on** wherein said
exchanging means transmits a logon name and password to said BTS to authenticate
said wireless mobile unit.
Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user
logon name and password for security authentication (eg. via Microsoft Windows OS).
One skilled would use the well known method of requiring Logon/password for security .
purposes. Cellular systems also utilize security precautions to prevent fraud and
cloning whereby the user is authenticated during the registration process.
It would have been obvious to one of ordinary skill in the art at the time of
applicant's invention to modify Magnusson, such that said DBO transmits a logon name
and password to said BTS to authenticate said wireless mobile unit, to provide
authentication of the user via a logon name and password.
As per **claim 11**, Magnusson teaches claim 9 wherein said exchanging means
stops an exchange of said data between said mobile unit and said BTS when said
mobile is not in said HDR area (page 5, L16-35 teaches mobile receiving SMS over cell
broadcast which one skilled understands can be continuously monitored for local carrier
service changes as the mobile roams. The examiner also notes that the mobile unit
must continuously monitor for HDR coverage as it roams since roaming out of coverage
will terminate the HDR service).

As per **claim 12**, Magnusson teaches a ~~system comprising~~:
        detecting when a wireless mobile unit is in an high data rate (HDR) area (page 5, L16 to page 6, L12 teaches SIM Card processor receiving/storing data from cell broadcast to include information about an HDR area), ,
        a processor being configured to determine a need for exchanging data between said wireless mobile unit and the base station (BTS) [page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21]; and
        A data burst optimizer (DBO) configured to exchange said data between said wireless mobile unit and said BTS in HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means for exchanging data based on the user's selected application).
        But is silent on a mobile unit determining when in HDR Area and a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS.
        Magnusson does teach the mobile unit determining which HDR system to use based on information it receives (see page 5, L16-19 and L32-35) which inherently means it knows when it is in the HDR area.
        O'Carroll teaches a communication system for wireless communications users (CDMA, C4, L35-47), discloses use of signal strength (C3, L23-27 and C8, L23-29) and will automatically transmit data when there is data to send (figure 7 shows that communications will automatically occur when the unit is within a certain area and there is data to transmit).
        It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it uses a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS, to provide means for the unit to determine when it can transmit data at high(er) data rates.

        As per **claim 13**, Magnusson teaches claim 12 **but is silent on** wherein said exchanging means transmits a logon name and password to said BTS to authenticate said wireless mobile unit.
        Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claim 15**, Magnusson teaches claim 12 **but is silent on** comprising: ·
Pinging said BTS to detect when said wireless mobile unit is in said HDR <u>CDMA</u> area after said invoking step and prior to exchanging step.

Magnusson teaches the BTS sending an SMS cell broadcast message which the mobile will receive to determine available carrier services (page 5, L16-35) – once received, the mobile would then exchange data via an optimal service. The "PING" command is a well known industry standard supported by TCP/IP and one skilled would use to determine availability of BTS services if/when a SMS cell broadcast message is not received.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it pings said BTS to detect when said wireless mobile unit is in said HDR area after said invoking step and prior to exchanging step, to provide means for detecting if the mobile can use HDR services for data transmission.

As per **claim 16**, Magnusson teaches claim 15 wherein said pinging step is performed by said data burst optimizer (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application and hence one skilled would expect said processory/DBO to perform pinging step as well).

As per **claim 19**, Magnusson teaches claim 17 **but is silent on** comprising:
Pinging said BTS to detect when said wireless mobile unit is in said <u>CMDA</u> HDR area after said invoking step and prior to exchanging step.

Magnusson teaches the BTS sending an SMS cell broadcast message which the mobile will receive to determine available carrier services (page 5, L16-35) – once received, the mobile would then exchange data via an optimal service. The "PING" command is a well known industry standard supported by TCP/IP and one skilled would use to determine availability of BTS services if/when a SMS cell broadcast message is not received.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it pings said BTS to detect when said wireless mobile unit is in said HDR area after said invoking step and prior to exchanging step, to provide means for detecting if the mobile can use HDR services for data transmission.

As per **claim 20-21**, Magnusson teaches claim 19/17 wherein said pinging step is performed by said data burst optimizer (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the

user's selected application and hence one skilled would expect said processory/DBO to perform pinging step as well).

As per **claim 26**, Magnusson teaches a computer readable medium including computer program, said program implementing a method for exchanging data between mobile and BTS (figure 1 shows laptop connected to mobile/SIM which inherently use computer/instructions to provide communications) comprising:

A first code segment for detecting when said wireless mobile is in a HDR area (page 5, L8-35 teaches system selecting the optimal carrier service, eg. HDR, based on an SMS cell broadcast message);

A second code segment for determining a need to exchange data between said mobile and said BTS (user operates computer application to transmit/receive data via mobile/SIM, page 5, L30-35);

A third code segment for invoking a DBO to synchronize an exchange of said data between said mobile and said BTS (page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21);

A fourth code segment for exchanging said data between said mobile and said BTS when said mobile is in said HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application).

But is silent on a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS.

O'Carroll teaches a communication system for wireless communications users (CDMA, C4, L35-47), discloses use of signal strength (C3, L23-27 and C8, L23-29) and will automatically transmit data when there is data to send (figure 7 shows that communications will automatically occur when the unit is within a certain area and there is data to transmit).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it uses a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS, to provide means for the unit to determine when it can transmit data at high(er) data rates.

As per **claim 27**, Magnusson teaches claim 26 **but is silent on** wherein a fifth code segment for transmitting a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claim 32**, Magnusson teaches claim 12 **but is silent on** wherein said exchanging data occurs at a speed of 2.4Mbps (Magnusson teaches high speed circuit switched data which reads on the claim, as does O'Carroll's teaching of CDMA).

Allowable Subject Matter

1. Claims 14, 17-18, 22-25 and 28-29 are allowed.

2. Per the Advisory Action previously transmitted, the independent claims appear to be novel if amended with claims 8 and 10.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
Primary Examiner
9-14-2005